



The Impact of the ELNEC Online Curriculum on Undergraduate Nursing Students' Self-Perceived Confidence in Providing Palliative Care

Joely T. Goodman, PhD, RN ○ Whitney Van De Graaff, MSN, RN, CPN ○
Aimee Burch, DNP, APRN-CNS, CMSRN, SCRNP ○ Jo Anne Genua, PhD, MN, BScN, RN, CCHNC ○
Amanda J. Kirkpatrick, PhD, RN, FAAN, FNAP

Nursing programs are compelled to integrate end-of-life care into curricula; however, consistency and quality between programs vary. The End-of-Life Nursing Education Consortium (ELNEC) created an online undergraduate curriculum to meet the need for consistent, high-quality palliative care education. The purpose of this study was to examine the impact of ELNEC's curriculum on undergraduate nursing students' confidence. The ELNEC curriculum was integrated across undergraduate nursing courses at a Midwestern Jesuit university. Upon completion of all 6 ELNEC modules, the Primary Palliative Nursing Care Competency Assessment Tool was used to assess students' self-perceived confidence before and after the program. Comparative and descriptive statistical analysis revealed significant positive changes in student confidence ($P = .003$), roughly equivalent to changing from "Somewhat Confident" to "Confident." Students rated themselves similarly across most domains with significant gains post ELNEC curriculum ($P < .0000$). In conclusion, the undergraduate ELNEC curriculum positively impacts nursing students' self-perceived skill and confidence in their delivery of

palliative and end-of-life care. Further reinforcement of ELNEC content through interactive and experiential learning supports student knowledge and a holistic approach to care of the entire person. Educators and clinicians might consider how ELNEC's programming can be leveraged to promote primary palliative nursing care competency.

KEY WORDS

competency assessment, end-of-life care, palliative care nursing, perceived confidence, undergraduate nursing curriculum

The American Association of Colleges of Nursing (AACN) includes care of patients and families during end-of-life (EOL) in The Essentials: Core Competencies for Professional Nursing Education.¹ This guides colleges of nursing in ensuring the principles of EOL care are adequately emphasized within Bachelor of Science in Nursing (BSN) curricula. Several leading organizations have issued position statements calling for primary palliative care (PC) competence as a standard; stating that all nurses, regardless of care setting, are responsible to meet AACN's Competencies and Recommendations for Educating undergraduate nursing Students (CARES) and to meet the call for nurses as leaders in PC.²⁻⁵

While PC refers broadly to interprofessional care delivered to patients with serious illness, primary palliative nursing care (PPNC) includes several essential nursing skill sets, including: assessment and management of pain and symptoms associated with serious illness, support to patients and families in complex decision-making and care transitions, compassion to dying patients, and bereavement care to those grieving.⁶ Quality PPNC requires advocacy, collaboration, and support of patients' goals of care.⁶ To address the need for high-quality education on use of best practices in EOL and PC, the End-of-Life Nursing Education Consortium (ELNEC) developed an online undergraduate/new graduate curriculum. The curricula

Joely T. Goodman, PhD, RN, is assistant professor, College of Nursing, Creighton University, Omaha, NE.

Whitney Van De Graaff, MSN, RN, CPN, is assistant professor, College of Nursing, Creighton University, Omaha, NE.

Aimee Burch, DNP, APRN-CNS, CMSRN, SCRNP, is associate professor, College of Nursing, Creighton University, Omaha, NE.

Jo Anne Genua, PhD, MN, BScN, RN, CCHNC, is assistant professor, College of Nursing, Creighton University, Omaha, NE.

Amanda J. Kirkpatrick, PhD, RN, FAAN, FNAP, is endowed professor, associate dean for Research and Innovation, College of Nursing, Creighton University, Omaha, NE.

Address correspondence to Joely T. Goodman, PhD, RN, College of Nursing, Creighton University, 2500 California Plaza, Omaha, NE 68178 (Joelygoodman@creighton.edu).

The authors have no conflicts of interest to disclose.

Copyright © 2025 by The Hospice and Palliative Nurses Association. All rights reserved.

DOI: 10.1097/NJH.0000000000001161



support the PPNC competencies defined in the AACN CARES document.⁶ A benefit of the ELNEC online curricula is that the material is current and kept up to date by experts in PC. The ELNEC curricula are theoretical, application-based, and provide case examples and helpful tips that can be used in practice. Furthermore, the ELNEC curricula address previous barriers to incorporating PC education in schools of nursing. The online format improves accessibility to geographically diverse and distance learners and allows for flexibility when adapting into current nursing curricula.⁶ The ELNEC Undergraduate/New Graduate Curriculum contains 6 modules: Introduction to Palliative Nursing; Communication in Palliative Nursing; Pain Management; Symptom Management; Loss, Grief, and Bereavement; and Final Hours of Life. Content within each module promotes critical thinking and skill development while providing National Council Licensure Examination-style questions and testimonials from PC experts.^{6,7}

The ELNEC curricula have been used broadly by undergraduate schools of nursing nationwide,⁸ including those with concept-based teaching models. These modules are adaptable and focus less on specific content and more on conceptual learning with activities that improve application. This high-level critical thinking is especially important in PPNC because serious illness occurs across the lifespan and healthcare settings.⁹ Guides for faculty, provided by ELNEC, support the application and implementation of module content through a variety of case studies.

While the online ELNEC curricula have been used widely, there are limited specific examples of its use and site-based research studies of its impacts within the published literature, especially for undergraduate nursing students. The effectiveness of the ELNEC graduate curriculum has been demonstrated, with students indicating improvement in self-perceived PC competency following completion of the curriculum.¹⁰ Graduate students reported feeling most

competent in defining hospice and PC services, communication, and symptom management.¹⁰

National survey data provide insights into student and faculty perceptions of the ELNEC Undergraduate/New Graduate Curriculum and lessons learned by early adopters of the online program.^{6,7} Overall, adoption of formal training programs like ELNEC supports undergraduate students in feeling equipped to care for seriously ill patients.¹¹ Further study using valid, reliable, and standardized methods of evaluation should be used to assess the efficacy of the ELNEC Undergraduate/New Graduate Curriculum in promoting PPNC competence.^{11,12} The purpose of this study was to examine nursing students' self-perceived confidence with palliative and EOL care after completing the ELNEC Undergraduate/New Graduate Curriculum.

METHODS

The ELNEC Undergraduate/New Graduate Curriculum was threaded into the 12-month accelerated BSN (ABSN) and 4-year traditional BSN programs at one Midwestern Jesuit university with 3 campuses, demonstrating PC application with various patient populations. The 6 ELNEC modules were added to courses by matching each module to curricular concepts and exemplars most closely aligned to each module's objectives (Table 1). Students enrolled in the ELNEC Undergraduate/New Graduate Curriculum at the beginning of their first clinical term and completed the final module during their final clinical term, and before preceptorship and completing an EOL simulation. Their length of enrollment in the ELNEC curriculum ranges from 9 months for ABSN students and 18 months for traditional BSN students.

In recognizing the importance of standardized, valid, and reliable assessment methods, faculty evaluated tools that could be used to assess the impact of the ELNEC modules on student outcomes.

TABLE 1 ELNEC Module Alignment Within Concept-Based Curriculum

ELNEC Undergraduate Module	Course (Didactic and Practicum)	Concept	Exemplar
1. Introduction to Palliative Nursing	Care Management Concepts III	Client-centered care coordination	Palliative care
2. Communication in Palliative Care	Care Management Concepts II	Communication	Interpersonal group dynamics
3. Pain Management in Palliative Care	Care Management Concepts I	Pain	Review of "pain" as a concept
4. Symptom Management in Palliative Care	Care Management Concepts II	Stress and coping	Chronic, debilitating disease
5. Loss, Grief, and Bereavement	Care Management Concepts I	Loss and grief	Process of grief, types of loss, types of grief
6. Final Hours of Life	Care Management Concepts III	Spirituality	End-of-life care

**TABLE 2** Summary of Primary Palliative Care Nursing Competence Assessment Tool

Domain	Competence Statements
Communication	3 statements about presence, therapeutic communication, and serious illness
Person- and Family-Centered Care	6 statements about culture, ethics, and shared decision-making
Assessment	6 statements about biopsychosocial-spiritual needs and caregiver assessments
Prioritization and Intervention	6 statements about biopsychosocial-spiritual needs, caregiver needs, and advocacy
Education	3 statements about important elements of education about serious illness or injury
Evaluation	1 statement about reassessment
Care Nearing End of Life	2 statements about assessing patient and family preferences for care and adjusting care to changing needs as death becomes imminent
Loss, Grief, and Bereavement	2 statements about care of the family and coping throughout the disease trajectory
Self-Care and Reflection	4 statements about self-care, reflective practice, and other aspects of lifelong learning

Theoretically, primary PC outcomes include cognitive, psychomotor, and affective domains of learning.¹² The cognitive and psychomotor domains of competency evaluation provide an objective approach to assess the impact of an educational intervention on student knowledge and performance. Our team uses objective instruments to assess students' cognitive and psychomotor outcomes in PC simulations and for summative course evaluations. While these are effective in evaluating the efficacy of our overall curriculum and program outcomes, for this study, we sought to isolate students' affective learning following their engagement in the ELNEC Undergraduate/New Graduate Modules.

The affective domain of learning includes self-efficacy, or the "belief in one's ability to perform a task."¹² One comprehensive review of literature conducted by Lippe et al¹² identified 5 instruments for evaluation of self-efficacy. Of these, only 2 demonstrated content validity: one solely focused on EOL communication skills, and the other, the Palliative Care Nursing Self-Competence Scale, was comprised of 50 items and 10 dimensions. While we aimed to identify a comprehensive measure of students' PPNC self-competence, the Palliative Care Nursing Self-Competence Scale was ruled out due to its length.

In another study, Lippe and Davis¹¹ set out to design a competence model and associated assessment instrument that could be used to comprehensively measure PPNC behaviors and interventions. The resulting instrument, the Primary Palliative Nursing Care Competence Assessment Tool (PPNC-CAT), responds to a critical gap in PPNC evaluation. Wording of each PPNC-CAT item was carefully selected and validated to support educators in capturing measurable and observable behaviors among undergraduate nursing students and entry-to-practice nurses. While the intent of this instrument was for objective behavioral assessment, it was used with permission as the conceptual framework and for assessment of students' self-perceived confidence in each competency statement. Psychometric testing was not conducted on the PPNC-CAT at the time of this study. However, the PPNC-CAT was selected

for its intentional flexibility and comprehensive design, with well-defined evaluation of key aspects of PPNC.

The PPNC-CAT instrument comprised of 33 items (competency statements) across 9 domains for use in formative and/or summative evaluation of student PPNC behaviors in clinical and/or simulated settings (Table 2). While this instrument was designed for use in assessing competency, in this study students completed the tool in a single survey as a retrospective pre-/postevaluation of their self-perceived skill and confidence in delivery of palliative and EOL care. For each of the 33 competency statements, the respondent was asked to reflect on their abilities before and after completing the ELNEC modules. The students rated their level of confidence (1–4) at both points by selecting "not confident," "somewhat confident," "confident," or "very confident."

Institutional review board determined this project to be exempt. Undergraduate nursing students enrolled across all 3 campuses in both the ABSN and traditional BSN programs were invited to participate in this study. A link to the survey with a letter about the study was embedded in the online learning management system within a prework assignment for students' EOL simulation in their final semester. There were 97 students in the ABSN program in Spring 2024, 86 students in the ABSN program in Fall 2024, and 112 students in the traditional program in Spring 2024 invited to participate in this study. All students enrolled in both BSN programs were required to complete all 6 ELNEC Undergraduate/New Graduate Modules, but participation in the study was voluntary. Students were provided a copy of the Bill of Rights for Research Participants and informed that the study was voluntary and that there were no risks to participating. Research participants provided demographic information and completed the PPNC-CAT¹¹ via Qualtrics survey. Demographic questions included: ABSN or traditional BSN program, gender, ethnicity, religion, experience with the loss of a loved one, experience with caring for a loved one who died, and participation in care of patient at end of life.



RESULTS

After duplicate responses and incomplete surveys were removed, there were a total of 292 participants, including 186 ABSN students across 2 cohorts and 3 campuses and 106 traditional BSN students in 1 cohort on 1 campus. Data assessment was conducted using descriptive and inferential analysis. Most students in all programs were: 25 years of age or younger (76.03%); female (83.6%); and White (67.5%) (Table 3). While fewer than half answered yes to dealing with loss of a loved one in the past year (43.1%) or caring for a loved one who died (45.5%), most reported caring for patients at EOL (68.6%).

A repeated measures analysis of covariance was used to assess and compare change in confidence scores on a 4-point scale for each PPNC-CAT domain between traditional and ABSN students. Age was mean centered, and previous experience with death was coded as dichotomous; both entered as covariates crossed with the repeated measures. There was a significant difference in confidence scores pre versus post ELNEC modules for all participants ($P < .0000$). There was also a significant difference in confidence scores between traditional and ABSN students ($P = .003$), between PPNC-CAT domains ($P < .0000$), and among programs and domains ($P < .0000$). There was a readily apparent increase between the pre- versus postconfidence ratings, roughly equivalent to a transition from "Somewhat Confident" to "Confident," across all domains and both programs. On retrospective pre-course confidence ratings, students in both programs rated themselves similarly across most domains, with significant gains post ELNEC curriculum ($P < .0000$). However, on postcourse confidence ratings, ABSN students rated themselves significantly higher than traditional students in all domains.

There were also main effects of domain ($P < .0000$), experience with death ($P = .006$), and age ($P = .039$). Significant pre- versus postinteractions were found among age groups ($P = .012$), between age and domain ($P = .00096$), and between program and domain ($P = .032$). Individuals with any experience with death rated themselves as more confident (mean = 2.73) than those who reported no experience (mean = 2.48). Overall, there was a positive relationship between age and retrospective precourse ratings for all domains.

The lowest domain mean precourse was Education (2.15) and postcourse was Care Nearing EOL (3.14). The highest domain mean precourse was Communication (2.4) and postcourse was Self-care and Reflection (3.27). The largest domain percent change overall was Education (48.1%; 2.15–3.19) and the smallest was Communication (33.9%; 2.40–3.21). The largest difference was in the Education domain (\bar{x} diff = 0.2317) and the smallest increase was in the Care Nearing EOL domain (\bar{x} diff = 0.1410). Cronbach alpha for the PPNC-CAT for this study was 0.987 (Lower Control Limit = 0.985; Upper Control Limit = 0.988) for all participants.

DISCUSSION

All students showed significant gains in perceived confidence across all 33 PPNC-CAT items and 9 domains post-ELNEC. ABSN students demonstrated higher postcourse confidence than traditional students. Influencing factors included student age and experience with death, though differences were modest. The greatest increase in confidence scores was revealed in the Education domain, with items reflecting students' ability to educate patients and families on palliative and hospice services, pain and symptom management, and signs and symptoms of imminent death. This may indicate students' precourse lack of awareness or experience in teaching others about PC. The lowest increase was measured in the Communication domain, where students also reflected the highest level of confidence before engaging in the ELNEC program, thus making gains harder to detect. Additionally, items in the Communication domain emphasize the use of therapeutic presence, compassion, and respect, which are core values of the Jesuit institution where this study occurred.

While a variety of tools for assessment exist to assess PPNC knowledge, attitudes, and perceived competence, the relationships between these constructs of competence remain theoretical and must be tested using validated and reliable instruments.¹¹ This study is similar to previous studies of the ELNEC Undergraduate/New Graduate Curriculum, which utilized a single assessment tool to evaluate learner outcomes, with no correlational analysis between other constructs of competence.^{6,7,13–17} In most of these studies, faculty-developed questionnaires were used to assess student satisfaction or comfort level with PC content on a 4-point,¹⁵ 5-point,¹⁴ or 10-point scale.^{6,16,17} Only one previous study utilized a validated tool to objectively measure student knowledge and perceived preparation for primary PC.¹³

This was the first study to employ use of the PPNC-CAT as a summative evaluation of self-perceived confidence in students' PPNC within a program that utilizes the ELNEC Undergraduate/New Graduate Curriculum. The tool demonstrated high internal consistency reliability ($\alpha = 0.987$), supporting its use in measuring the intended concept, primary PC nursing competence. The PPNC-CAT is unique in that it moves beyond purely patient- and family-focused items to include a domain of introspection by evaluating nursing skills in self-care and reflection.¹¹ This emphasis on evaluating nurse coping skills is essential in promoting the health and sustainability of our nursing workforce, especially in the area of PPNC competency. In this study, the domain of Self-care and Reflection scored highest following students' completion of the ELNEC Undergraduate/New Graduate Curriculum, aligning with Ferrell et al's⁶ emphasis on the importance of preparing nurses to cope emotionally.

Findings of this study reinforce current evidence that the ELNEC Undergraduate/New Graduate Curriculum supports students in feeling more prepared^{6,7} and that prior experience

**TABLE 3** Demographic Data

	Both Programs	ABSN	TRAD
Age			
21–25	76.03%	62.4%	100%
26–40	22.95%	36%	N/A
Over 40	1.02%	1.6%	N/A
Mean age, y	24.7	26.4	21.8
Campus			
Grand Island	0.7%	0.7%	N/A
Omaha	50.7%	14.4%	36.3%
Phoenix	48.6%	48.6%	N/A
Gender			
Female	83.6%	81.2%	87.7%
Male	15.1%	16.7%	11.3%
Other/prefer not to say	1.4%	2.1%	0.9%
Ethnicity			
White	67.5%	56.5%	86.8%
Asian/Native Hawaiian/Pacific Islander	14%	17.2%	8.5%
Black	5.1%	8.1%	N/A
Hispanic	4.8%	7.5%	0.9%
Other/prefer not to say	8.6%	10.8%	3.8%
Religion			
Catholic	34.2%	25.8%	49.1%
Christian	21.6%	23.7%	18.9%
Spiritual/other/none	44.2%	50.5%	32.1%
Experience			
Any experience with death/EOL	86%	85.5%	84%
No experience with death/EOL	14%	14.5%	16%
Abbreviations: ABSN, accelerated Bachelor of Science in Nursing; EOL, end-of-life; N/A, not applicable; TRAD, traditional Bachelor of Science in Nursing.			

with death positively impacts a student's perceived preparation for PC delivery.¹⁵ We found that students with personal or professional loss rate themselves as more confident in PPNC and that ABSN students may benefit more from the ELNEC curriculum due to age and prior experience, though not statistically different. Lin et al¹⁵ reported similar findings among ABSN students in their study of the ELNEC Undergraduate/New Graduate Curriculum, which could reflect life experience or professional maturity as a contributing factor to self-perceived PPNC confidence. Lin et al¹⁵ utilized qualitative findings to support the suggestion that experiential learning drives impact.

Lippe and Davis¹¹ designed the PPNC-CAT as both a framework for behavioral assessment and to assist educators in identifying programmatic concepts and curricular gaps. Its use in this study reinforces the tool's use in understanding existing curricular opportunities. For example, post-ELNEC scores were lowest in the domain of Care Nearing EOL and are consistent with the lowest confidence among nurse residents in another study.¹⁷ This indicates an opportunity to improve learner preparation for their roles in assessing patient and family EOL preferences and preparation for rapidly changing needs in the imminent death period beyond the ELNEC modules. These insights are timely given the movement to



competency-based education and as nursing schools map learning experiences to the AACN Essentials and spheres of care. Many programs, including that where this study was conducted, are actively undergoing curricular revisions and tailoring future approaches to support faculty development, adoption of teaching resources, and address learning needs.

Schools of nursing might apply these findings of this study and others when adopting the ELNEC Undergraduate/New Graduate Curriculum and determining how it will be implemented within their program. Li et al¹⁴ reviewed the placement of the ELNEC Core curriculum in a BSN program. At the time of their study, ELNEC had 8 modules that were threaded throughout the program, with 1 module occurring at the sophomore level, 2 modules at the junior level, and 5 modules at the senior level. Students were surveyed about the placement of the modules. Student preference for module placement was evenly distributed among sophomore, junior, and senior levels. Further, students reported that all modules were suitable to be placed in the junior and senior levels.¹⁴

Studies of the ELNEC Undergraduate/New Graduate Curricula demonstrated varied approaches to module implementation. Some found success in implementing the curriculum across multiple semesters,^{6,7} whereas others implemented all modules within a single course^{10,13} or within a postgraduate nurse residency program.¹⁷ Most of these were conducted with ABSN students and required students to complete all modules as part of the course or program, where one study opted for voluntary completion.¹⁵ Programs varied in their use of the program as an online only or flipped classroom strategy, where content was discussed and applied in class or during a clinical conference with meaningful debriefing.^{7,16} Regardless of level of learner, program type, online versus hybrid, required versus voluntary, or course/curricular threading, students reported they gained valuable knowledge from the ELNEC modules, leaving them more confident to provide PPNC. This demonstrates the versatility, flexibility, and efficacy of the ELNEC Undergraduate/New Graduate Curriculum. While this study focused on undergraduate nursing, Jizba et al¹⁰ had similar gains in confidence among nurse practitioner students following the ELNEC Graduate Curriculum. These findings suggest that even graduate students have knowledge deficits related to PC; thus, early exposure to ELNEC at the undergraduate level could foster foundational confidence that is reinforced by graduate education. The observed growth in students' leadership-related domains—particularly Education and Self-Care—supports this progression.

Limitations

This study provides valuable insights into the impact of the ELNEC Undergraduate/New Graduate Curriculum on student confidence in PC. One limitation of this study is memory bias.¹⁸ The retrospective pre-/postevaluation relies on students' memory and self-perceptions of their growth, which may not accurately reflect their actual knowledge

or skills in EOL care or their initial competency levels. Additionally, reliance on retrospective data is susceptible to subjective bias recall as students may over- or underestimate their confidence and knowledge levels.¹⁸ In PC, experiences can be emotional and affect the students' ability to accurately remember their initial levels of confidence. In addition, they may be influenced by wanting to report growth in their skills and knowledge.

According to Polit and Beck,¹⁸ it is important to assess generalizability and its application to diverse populations, settings, or circumstances beyond the specific sample studied. The sample for this study was from 3 campuses (Omaha, Grand Island, and Phoenix) and included students from the ABSN and traditional BSN programs within one institutional environment. While the inclusion of students enrolled in both traditional and ABSN programs enhances the generalizability of the findings, the study sample only included nursing students from one Jesuit university thus may not be applicable to other educational programs and institutions that are not faith-based. Furthermore, the use of the ELNEC Undergraduate/New Graduate Curriculum has been predominantly studied in academic settings. Future research should explore the effectiveness of integrating the ELNEC Undergraduate/New Graduate Curriculum across diverse settings and in partnership with healthcare organizations. A preintervention and postintervention evaluation with long-term impacts on patient care delivery should be further explored. While the results of the present study demonstrated increased student confidence with palliative and EOL care after completing the ELNEC training, this merits further research.

Implications

This study reinforces the ELNEC Undergraduate/New Graduate Curriculum's positive impact on nursing students' self-perceived skills and confidence in delivery of palliative and EOL care. Though most existing studies of this online resource focused on use in prelicensure programs, the modules also have application for new graduate nurses as they transition to practice. Healthcare organizations might consider the adoption of these modules within nursing orientation or nurse residency programs as a timely approach that promotes direct application of module content within the practice setting. Educators and clinicians might consider how ELNEC's programming can be leveraged to promote PC competency among nursing professionals. These findings are applicable for faculty in undergraduate programs as well as staff educators in clinical settings, as PPNC competency is expected of all nurses upon entry to practice. By engaging in the ELNEC Undergraduate/New Graduate Curriculum, future and current nurses gain beginning PC competency and skills in delivering high-quality PC to seriously ill individuals. Integrating PC education into the nursing curriculum also has societal benefits. Nurses who receive EOL training are better equipped to support patients holistically, resulting



in improved quality of life for patients and support for their families.¹⁹

These results build on previous research highlighting the importance of the ELNEC Undergraduate/New Graduate Curriculum and integration of EOL education within BSN and nurse residency programs.^{13,15–17} Reinforcement through interactive and experiential learning supports student knowledge and enhances the curriculum's impact. Specific opportunities for reinforcement include patient education earlier in nursing programs and emphasizing patient care when they are near the end of life. Care in the final hours was noted as an area of low confidence in multiple studies; thus, education on the signs and symptoms of imminent death and rapidly changing needs of patients at end of life should be augmented through application exercises and experiential learning.

CONCLUSIONS

Integrating a standardized primary PC education curriculum is challenging but important—preparing new nurses with strong communication skills, ability to assess symptom and treatment-related issues in advanced disease, and assisting with care coordination that aligns with patient goals/wishes. This study examined the impact of the ELNEC Undergraduate/New Graduate Curriculum on undergraduate nursing students' self-perceived confidence in providing PC. The findings revealed significant positive changes in confidence for undergraduate nursing students, underscoring ELNEC Undergraduate/New Graduate Curriculum as an effective and easily adapted program for nursing schools. Further reinforcement of ELNEC content through interactive and experiential learning supports student knowledge.

Acknowledgments

We gratefully acknowledge the contributions of Dr. Jack Taylor from the Creighton University Biostatistical Core for his expert support with statistical analysis. We also thank Keshia Kotula, Helen Chapple, Jacquie Hanks, Brooke Hancock, Cindy Selig, and Marilee Aufdenkamp for their thoughtful review of the ELNEC modules to ensure alignment with our concept-based curriculum. In particular, we extend our deep appreciation to Cindy Selig and Marilee Aufdenkamp, who served as principal investigators during the original development and launch of this study before their retirements. Their leadership and foundational work were instrumental in bringing this project to life.

A special note of acknowledgment is extended to Dr. Polly Mazanec for her critical expertise and advisory support as we evaluated the ELNEC program and prepared our curricular proposal. Her insights into how similar integrations have been successfully implemented at other institutions, as well as her guidance on addressing common barriers to embedding essential palliative care content, were both imperative and deeply valued.

References

1. American Association of Colleges of Nursing. The essentials: core competencies for professional nursing education. <https://www.aacn-nursing.org/Portals/0/PDFs/Publications/Essentials-2021.pdf>. 2021. Accessed May 8, 2025.
2. American Association of Colleges of Nursing. CARES: competencies and recommendations for educating undergraduate nursing students: preparing nurses to care for the seriously ill and their families. <https://www.aacnnursing.org/Portals/0/PDFs/Teaching-Resources/New-Palliative-Care-Competencies.pdf>. 2016. Accessed May 8, 2025.
3. American Nurses Association. Position statement: nurses' roles and responsibilities in providing care and support at the end of life. https://www.nursingworld.org/globalassets/docs/ana/practice/official-position-statements/nursesrolesandresponsibilitiesinprovidingcareandsupportattheendoflife_revised_bod-approved_final.pdf. 2024. Accessed May 8, 2025.
4. American Nurses Association and Hospice and Palliative Nurses Association. Call for action: nurses lead and transform palliative care. <https://www.nursingworld.org/globalassets/practiceandpolicy/health-policy/palliativecareprofessionalissuespanelcallforaction.pdf>. 2017. Accessed May 8, 2025.
5. Institute of Medicine. *Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life*. The National Academies Press; 2015.
6. Ferrell B, Mazanec P, Malloy P, Virani R. An innovative end-of-life nursing education consortium curriculum that prepares nursing students to provide primary palliative care. *Nurse Educ*. 2018;43:242-246.
7. Davis A, Lippe M, Glover TL, McLeskey N, Shillam C, Mazanec P. Integrating the ELNEC undergraduate curriculum into nursing education: lessons learned. *J Prof Nurs*. 2021;37:286-290.
8. American Association of Colleges of Nursing. What is competency-based education? <https://www.aacnnursing.org/essentials/tool-kit/competency-based-education>. 2021. Accessed May 8, 2025.
9. Giddens J, Caput L, Rodgers B. *Mastering Concept-Based Teaching: A Guide for Nurse Educators*. 2nd ed. Elsevier, Inc.; 2020.
10. Jizba T, Iverson L, Hall A. Effects of the ELNEC graduate curriculum on nurse practitioner students' perceptions of primary palliative care competency. *Nurse Educ*. 2022;48:E64-E66.
11. Lippe M, Davis A. Development of a primary palliative nursing care competence model and assessment tool: a mixed methods study. *Nurs Educ Perspect*. 2022;4:76-81.
12. Lippe MP, Wingett G, Davis A, et al. Instruments for evaluating student learning outcomes in palliative care: a literature review. *J Hosp Palliat Nurs*. 2022;26:265-272.
13. Harwell JH, Lippe M. Impact of ELNEC-Undergraduate curriculum on associate degree nursing student primary palliative care knowledge. *Teach Learn Nurs*. 2021;16:210-214.
14. Li J, Smothers A, Fang W, Borland M. Undergraduate nursing students' perception of end-of-life care education placement in the nursing curriculum. *J Hosp Palliat Nurs*. 2019;21:E12-E18.
15. Lin J, Supiano KP, Madden C, McLeskey N. The impact of the end-of-life nurse education consortium on attitudes of undergraduate nursing students toward care of dying patients. *J Hosp Palliat Nurs*. 2018;20:340-348.
16. Mazanec P, Ferrell B, Malloy P, Virani R. Educating associate degree nursing students in primary palliative care using online-e-learning. *Teach Learn Nurs*. 2019;14:58-64.
17. Mazanec P, Ferrell B, Virani R, Alayu J, Ruel NH. Preparing new graduate RNs to provide primary palliative care. *J Contin Educ Nurs*. 2020;51:280-286.
18. Polit DF, Beck CT. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. 11th ed. Wolters Kluwer; 2021.
19. American Association of Colleges of Nursing. End of life nursing education consortium (Fact Sheet). <https://www.aacnnursing.org/Portals/0/PDFs/ELNEC/ELNEC-Fact-Sheet.pdf>. 2025. Accessed May 8, 2025.